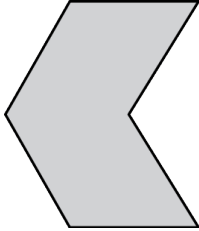


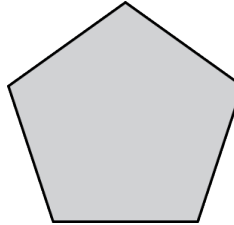
### 3.3 Practice A

Use triangles to find the sum of the interior angle measures of the polygon.

1.

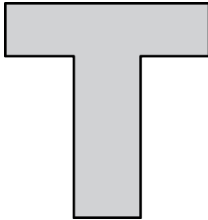


2.

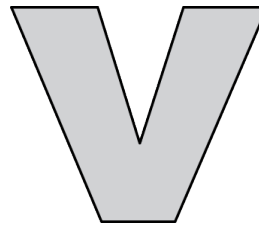


Find the sum of the interior angle measures of the polygon.

3.



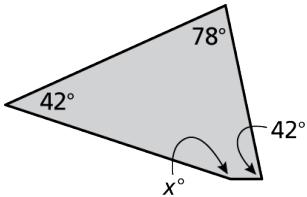
4.



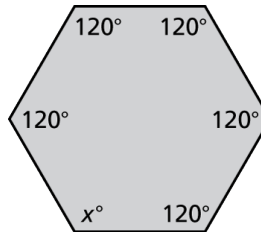
5. Can an octagon have interior angles that measure  $100^\circ$ ,  $156^\circ$ ,  $125^\circ$ ,  $90^\circ$ ,  $175^\circ$ ,  $134^\circ$ ,  $160^\circ$ , and  $140^\circ$ ? Explain.

Find the measures of the interior angles.

6.



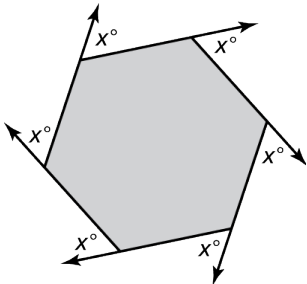
7.



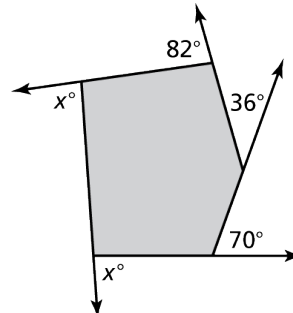
8. A stop sign is in the shape of a regular octagon. What is the measure of each interior angle?

Find the measures of the exterior angles of the polygon.

9.



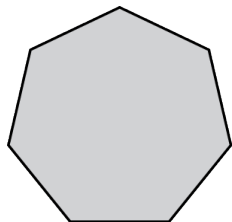
10.



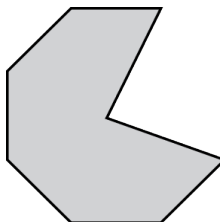
# 3.3 Practice B

Use triangles to find the sum of the interior angle measures of the polygon.

1.

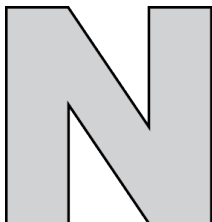


2.

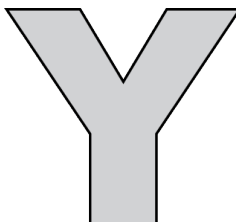


Find the sum of the interior angle measures of the polygon.

3.



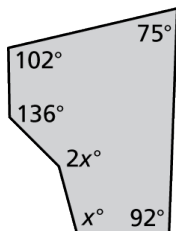
4.



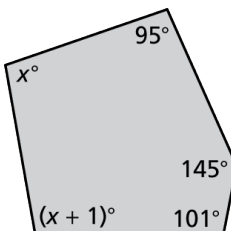
5. Four interior angles of a pentagon measure  $50^\circ$ ,  $73^\circ$ ,  $146^\circ$ , and  $161^\circ$ . Find the missing angle measure.

Find the measures of the interior angles.

6.



7.



8. The interior angles of a regular polygon each measure  $135^\circ$ . How many sides does the polygon have?
9. Use the polygon shown.
- Is the polygon *convex* or *concave*?
  - Is the polygon *regular* or *not regular*?
  - What is the name of the polygon?
  - What is the sum of the interior angle measures in the polygon?

